

Cookshack, Inc.

OPERATOR'S MANUAL

**Models 350 & 360
SmartSmoker® Oven**

Version 07.1
Model 350 & 360
Serial No: _____



Dear Cookshack Customer:

Your Model 350 or 360 Cookshack SmartSmoker® oven will produce great barbecue and smoked foods. It is easy to operate, clean, and maintain. Use this Operator's Manual to familiarize yourself with the smoker and its operation. If you have a question or problem not covered in the book, call us at 1.800.423.0698 Monday through Friday, 9am to 4 pm or e-mail us at info@cookshack.com. You can also join the Cookshack Barbecue Forum on our website at www.cookshack.com which has high participation by both Cookshack customers and staff.

You must observe safe operating practices when using the smoker. It is an electrical appliance, and is therefore potentially dangerous! Cookshack, Inc., assumes no responsibility for results of careless and dangerous operation of Cookshack smokers or other products. All warranties are null and void if the practices described in the Operator's Manual are not observed.

Read the following instructions thoroughly and completely before using your smoker!! Observe the instructions carefully. Be certain that you understand completely how it operates before attempting to operate it.

This smoker oven is intended for use as a food smoker. It generates heat from an electric heating element. It is not intended for any use not specifically described in this manual. Misuse of this smoker can result in serious injury and a fire hazard.

With those cautions in mind, enjoy your smoker and the delicious foods it will produce.

The Folks at Cookshack
Sales & Customer Service: 580-765-3669
Toll Free Orders: 800-423-0698
24 Hr. Fax: 580-765-2223

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SETTING UP

Choosing a Location

Your smoker must be operated inside. Placement will be determined by convenience to the rest of cooking operation, ventilation, wiring connection, and clearance from flammable materials.

Do not place flammable or combustible materials on or adjacent to the smoker.

Ventilation

A small amount of smoke will escape from the vent hole in the top of the oven and from around the door. The oven should be placed under a hood or near a door or window with an outside exhaust.

A simple wall vent fan is adequate in many locations. Fasten no pipes to oven vent.

An optional vent hood for your smoker is available from COOKSHACK. The stainless steel Smokehood incorporates a removable grease filter and an exhaust fan. It mounts directly on top of the smoker and removes the smoke vented during normal smoke cooking.

Electrical Power Connections

WARNING! All warranties are null and void if the installation of the power receptacle is not done in strict compliance with these instructions, NEMA codes, and any other applicable electrical codes.

COOKSHACK Models 350/360 have a four burner system using 240V AC single phase power. Connect these ovens to the power supply by connecting to a Leviton receptacle part number CS63-69, or equivalent. You will need to have a 240V AC single phase power supply, with a neutral wire, protected by a 50 ampere fuse or circuit breaker.

NOTE! Due to the expense of this equipment and the risk of danger to the electrical system contained within this equipment, installation of power receptacles should be done only by a qualified electrician.

A long or light-duty extension cord will reduce the efficiency of the heating elements and food will take longer to cook.

COOKING

Seasoning of Oven

The interior of your oven should be “broken in” or seasoned before you cook your first load of meat. Place no more than 12 oz. of wood in each Wood Box. (see Wood Selection, below) for a total of no more than 24 ounces. Close and latch the oven door. **(NOTE: The oven door will be hard to close. Use of both hands may be required. This is necessary in order to obtain a good seal.)** Set temperature to 225°, and turn the smoker on. Let the oven smoke, without meat, for a minimum of four hours. Further seasoning will occur as you cook in the oven.

Wood Selection

You may use any fruit or nut hardwood in your smoker, as long as it has good flavoring abilities. The most popular woods for smoking are hickory, mesquite and apple. Any of these will work in your smoker and are available from Cookshack.

Other regional favorites are alder, beech, cherry, apple, pecan, maple, oak, buttonwood, and mangrove. Use local woods only if logs are selected and sized properly and if you are satisfied with their flavoring abilities.

Caution: The maximum amount of wood to be used in your Cookshack Model 350/360 is 24 ounces—approximately 12 ounces per Wood Box. Do not overload Wood Boxes

Use only dry wood. You will get the best results in finished product with dry wood. Wet wood will release acids that will damage heating elements and reduce the length of their life.

Preparing the Oven for Cooking

CAUTION! Operation of a dirty oven may create a fire hazard. Do not allow debris to accumulate in the oven interior or on oven grills. Such debris may create a fire hazard! Follow all shut down and cleaning instructions carefully.

1. Check that the Wood Box Housing is placed over the Heating Elements and pushed all the way to the back of the oven. Place properly loaded Wood Boxes in oven. Do not remove the Wood Boxes from the oven during the cooking cycle.
2. Line the bottom of the oven with aluminum foil and punch a hole in the foil corresponding to the drain hole. Cover the Heat Deflector with foil for easy cleaning. Discard the foil after each cooking and replace with fresh foil.
3. Place drain pan beneath the drain holes located in oven bottom and in the trough at bottom front of the smoker or pipe the drain to a grease trap per your local plumbing codes. This drip pan should be emptied after each cooking.
4. Notice that the grills in your smoker can be rearranged to accommodate different sizes of meat. When smoking thick items, such as turkeys or large hams, remove alternate grills. When hang-smoking ribs, remove all except the top and bottom grills, and raise side racks to highest position.

IMPORTANT! Do not operate oven without Wood Box Housings and Wood Boxes in proper position.

Smoker Oven Maximum Load Capacity

IMPORTANT! Do not overload your smoker. Use the Smoker Oven Maximum Load Capacity chart below to determine the maximum capacity of your smoker.

The following chart shows maximum cooking capacities, per load, of your Cookshack Smoker oven. Capacities are based on 3 lb. ribs, 8-10 lb. heavy cuts, and 3 lb. chickens. Capacities are specifically limited by the amount of heat available.

	Ribs Pounds	Heavy Cuts (pork butts, briskets, etc.) Pounds	Chickens Each
Model 350/360	270	550	100

Loading the Oven with Meat

1. Keep meat approximately 1" away from the back and side oven walls at all times.
2. Arrange meat with fewer cuts on lower grills. Heavy loading of bottom grills will block heat and prevent smoke from traveling to the top of the oven. This will result in undercooked meat on upper grills. (Allowances are made for loading arrangements when oven capacities are calculated.)
3. Load only half full the first time you cook, and gradually increase to a full load with successive batches. Monitor closely to determine what cooking time and load amount produce the results you desire.
4. When possible, cooking schedules should be arranged so that the same amount of an item is cooked each time. This allows full use of the automatic operation of the oven; it will save time; a better and more consistent product will be obtained.

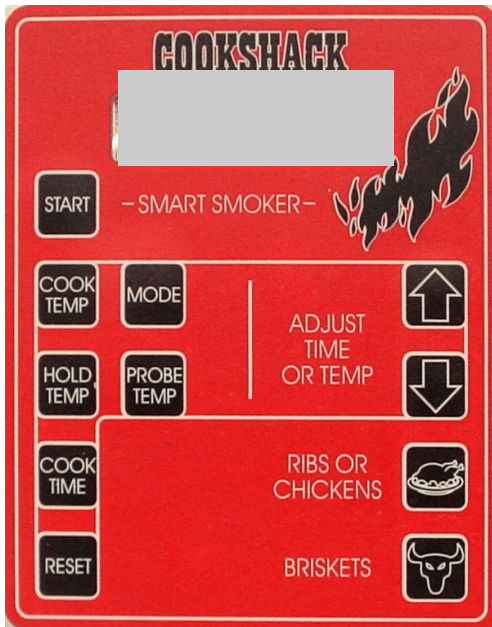
When the oven is loaded according to above instructions, close and latch the oven door. Fasten the door latches securely.

Close the oven door using all latches when the oven is on. Failure to close door may result in release of large amounts of smoke and may result in smoke damage to your building interior.

Setting the Cooking Temperature

Your Cookshack Model 350/360 has the new Cookshack IQ3 control system. This controller has the same great cook & hold features as the previous models of the IQ controller, but with an additional feature that allows you to cook with a meat probe. This optional probe plugs into the unit and allows you to set the internal temperature to which you want the product cooked. If you did not purchase the meat probe with your unit, call Cookshack Customer Service at (800) 423-0698 to order your probe.

Directions for using the Controller



1. Turn Master Switch ON.
2. Choose the desired mode by pressing the MODE button while simultaneously pushing the up or down arrow until the desired mode flashes: Cook Mode for standard operation, which automatically drops into the preset hold temperature after the preset cooking time is reached; Probe Mode if cooking with the optional meat probe. The default mode is Cook Mode.
3. Set cooking temperature by pressing and holding the COOK TEMP button while using the ADJUST TIME OR TEMP buttons to change settings.
4. Set holding temperature by pressing and holding the HOLD TEMP button while using the ADJUST TIME OR TEMP buttons to change settings.
5. If using the Cook Mode, set cooking time by pressing and holding the COOK TIME button while using the ADJUST TIME OR TEMP buttons to change settings.
6. If using the Probe Mode, set probe temperature by pressing and holding the PROBE TEMP button while using ADJUST TIME OR TEMP buttons to change settings.
7. Press START.

To use the meat probe, simply insert the jack into the covered RCA receptacle on the controller panel. Place the probe end through the vent hole on the oven top and press into the largest piece of meat in the smoker oven. The oven will cook at the set cooking temperature until the internal temperature of the meat reaches the temperature at which the probe is set. At that point the controller will change to the set holding temperature and remain there until the unit is manually shut down. An audible signal indicates that the cook cycle is complete and that the oven is going to the Hold Temperature Mode.

If cooking in the default Cook Mode the smoker will cook the product at the selected cooking temperature for the selected cooking time and then change to the selected holding temperature until it is shut off manually.

During the Cook Mode the LCD display of the IQ continually displays oven status after the cook cycle has been started. Using these features any kitchen staff can easily determine the status of the load in progress.

Please note that the oven temperature displayed while the oven is running is the actual air temperature inside the oven. The probe temperature displayed is the internal temperature of the product. In order to see the set cooking temperature, probe temperature, or holding temperature, press the corresponding button.

The IQ Controller is equipped with two **preset buttons** for easy selection of common settings for popular foods. Pressing the button marked **Ribs or Chickens** will make the following settings:

Cook Temp 225°F

Hold Temp 140°F

Cook Time 3 hours

Pressing the button marked **Briskets** will make the following settings.

CookTemp 225°F

HoldTemp 140°F

CookTime 12:00 hours

Once one of these preset buttons has been pushed you may start a Cook cycle using these settings by simply pressing Start

The IQ controller is equipped with a power backup system to prevent your smoker from “forgetting” what it is doing in the case of a power failure. The IQ will wait out power failures of up to 3 minutes and resume normal cooking. This backup system means that turning off the Master Switch will not cause the IQ to forget its current instructions. The **Reset button** may be used to clear these current instructions and cause the IQ to start over from the beginning.

Holding

Meat should always be wrapped or sealed immediately upon removal from your smoker, and held this way until ready to serve.

To minimize the danger of food becoming contaminated, follow a few key steps.

The most important step is hand washing. Employees can easily transmit germs to clean food if they don't follow basic personal hygiene. It is very important to wash after touching raw meat, fish, poultry, or dirty utensils.

Refrigerated cases should keep food at 38°F or below. Hot display cases should keep food above 140°F.

Some microorganisms, which can cause disease when present in low numbers, don't require temperature abuse to be dangerous. To avoid these diseases, exclude infected personnel from foodservice operations, use clean utensils when handling food, practice clean personal hygiene, and use the proper containers when covering food.

Remember, these are basic guidelines only and are not intended to replace laws, regulations, or restrictions concerning the handling and processing of food products. For further information, use your local health department guidelines to determine the best method for holding product, hot or cold.

SHUTDOWN PROCEDURE

Safety First

1. Turn on/off switch to OFF position.
2. Wait at least 10 minutes before opening door.
3. Open the door slowly. This allows the wood and elements to cool sufficiently so that a fire will not occur when the cold air rushes into the oven.

**IMPORTANT!! If oven is to be left unattended with the door open, remove the Wood Boxes from the oven using the wood box handle and douse the contents with water.
FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN A FIRE HAZARD!**

CLEANUP

Procedures

Always disconnect the oven from its electrical supply before cleaning or servicing.

Your Cookshack smoker must be kept clean. Loose grease and scale should be removed regularly to prevent buildup, which may cause strong fumes. It is desirable to allow seasoned coating, such as that found on a well-seasoned cast iron skillet, to remain on the oven walls. For this reason we do not recommend attempting to restore the oven walls to a “like new” state after each cooking. The use of detergent, chemical cleaners or “oven cleaner” is not advised.

Follow this procedure after each load:

1. Disconnect oven from power supply.
2. Allow the oven to cool.
3. Remove the grills and racks; scrape and wash with soap and water.
4. Empty Wood Box. (Remember it's hot!) Use the Wood Box handle supplied with oven.
5. Discard aluminum foil.
6. Remove all grease from interior of oven.
7. Empty drip pan.
8. Leave door slightly ajar when oven is not in use.
9. Refer to safety precautions above.
10. Replace Wood Box to correct position.

Follow this procedure every 4 - 5 loads:

1. Remove grills and racks; scrape and wash.
2. Empty Wood Box. (Remember it's hot!)
3. Remove Wood Box Housing and brush clean. (Remember it's hot!)
4. Scrape loose grease and scale from walls with flat edge scraper.
5. Replace racks and grills.
6. Return Wood Box Housing and Wood Boxes to correct position.

IMPORTANT: Reverse the above cleaning instructions after each cleaning to re-assemble the oven correctly. Do not operate oven without Wood Box Housing and Wood Boxes in proper position.

IMPORTANT: Bottom of oven must be kept clean. Replace foil in bottom of oven and on Heat Deflector after each cooking and remove all excess grease from interior of oven. Drain hole must be open at all times. If drain becomes plugged, oven bottom can fill with grease and a fire hazard may occur!

MAINTENANCE

Procedures

1. Periodically check electrical plug and wire for any type of wear or damage.
2. Twice annually put two drops of lightweight oil on the hinge pins to prevent binding.
3. Check casters regularly for freedom of movement.

TROUBLESHOOTER'S GUIDE

Operation

<u>PROBLEM</u>	<u>POSSIBLE CAUSE</u>	<u>SOLUTION</u>
Uneven cooking	Improper Meat Loading	See Loading Instructions
Strong grease fumes; "charcoal" flavor	Excessively dirty oven	See cleaning instructions
Meat sticks to lower grill	Heavy "blanket" loading	Load with ample room for upward passage of heat
	Direct burner heat in center of grill	Place foil under meat on bottom grill
Smoke coming from top of door	Normal	
Product gets too done on the bottom grills; product on top grills is raw or underdone.	Improper loading	Load lighter at the bottom for efficient heat and smoke circulation
Although smoker is set with the same time and temperature as always, product is now taking longer to cook	Malfunctioning heating elements.	Have electrician change element.
Actual oven temperature reads 5 to 20° higher or lower than set temperature	Normal	

TROUBLESHOOTER'S GUIDE

Cooking

<u>PROBLEM</u>	<u>POSSIBLE CAUSE</u>	<u>SOLUTION</u>
Poultry too dark	Too much wood	Use less wood. Poultry absorbs smoke easily so start with the minimum amount suggested and gradually increase quantity of wood in successive loads until desired flavor is reached.
Bitter skin on poultry	Too much wood	Use less wood.
Fish too dark	Too much wood	Use less wood.
No smoke taste	Not enough wood	Use more wood.
Ribs too dry	Oven humidity too low	Increase cooking temperature and decrease cooking time.
Skin cracking on poultry	Oven humidity too low	Rub with vegetable oil, butter or mayonnaise before smoking. Use a Cookshack Water Magazine to increase oven humidity.
Fish fall through grills	Overcooking	Cook for shorter time.
	Grill spacing too large to support fish	Use Cookshack Seafood Grills.
Ribs fall off RibHooks	Ribs not securely fastened	Review RibHook instructions; make sure ribs are securely fastened.
	Overcooking	Cook shorter time.
Poultry not getting done	Overloading	Review loading and capacity instructions.
Dry product	Oven humidity too low	Follow smoker oven loading instructions in Operator's Manual. Always load bottom shelves lighter. Do not use sheet pans in the smoker. They block even circulation of heat and smoke.
Brisket on bottom cooks too fast	Improper loading	Load bottom grill with fewer briskets and load with fat side down.
Load cooks unevenly	Improper loading	Follow smoker oven loading instructions in Operator's Manual. Always load bottom shelves lighter. Do not use sheet pans in the smoker. They block even circulation of heat and smoke.

APPENDIX A

Two Year Limited Warranty

Cookshack Smoker Ovens are guaranteed to be free from defects in material and workmanship under normal use and when installed in accordance with factory recommendations.

This limited warranty includes parts and labor for the first 90 days. Following the 90 day period, the two (2) year limited warranty is for parts only.

Cookshack, Inc.'s obligation under this warranty shall be to repair and replace at its option any part deemed defective upon examination by Cookshack, Inc., or its authorized agent, for a period of two (2) years from the date of sale.

PROCEDURES

1. Customer must obtain approval from Cookshack, Inc. before performing any service. Cookshack, Inc. is not responsible for any unauthorized service work.
2. The Limited Warranty extends to the original purchaser only.
3. To make claim or request for the Limited Warranty, the original purchaser must notify Cookshack, Inc. Customer Service for instructions as to the repair or replacement of the defective merchandise prior to attempting or contracting for repair of the oven. **(See Appendix B for additional information regarding this procedure.)**
4. The Limited Warranty shall not apply if the merchandise has been improperly installed, damaged due to abuse, misuse, misapplication, accident, or as a result of service or modification by any other than an authorized Cookshack, Inc. service agent.
5. There are no express warranties other than the limited warranty stated herein above. No warranties whether express or implied, including, but not limited to, any implied warranties of merchantability of fitness for a particular purpose, shall extend beyond the respective warranty periods described above.
6. Cookshack, Inc. shall not be liable for any direct, indirect, special, consequential, incidental, or punitive damages; lost profits or loss of use or interruption of business regardless of the form of action or theory of liability resulting from any defect in or use of the Cookshack smoker oven, accessories and/or heating elements.

Additional information on obtaining service under this Limited Warranty is available on the following page or by contacting a Cookshack, Inc. Customer Service Representative directly at (580)765-3669.

APPENDIX B

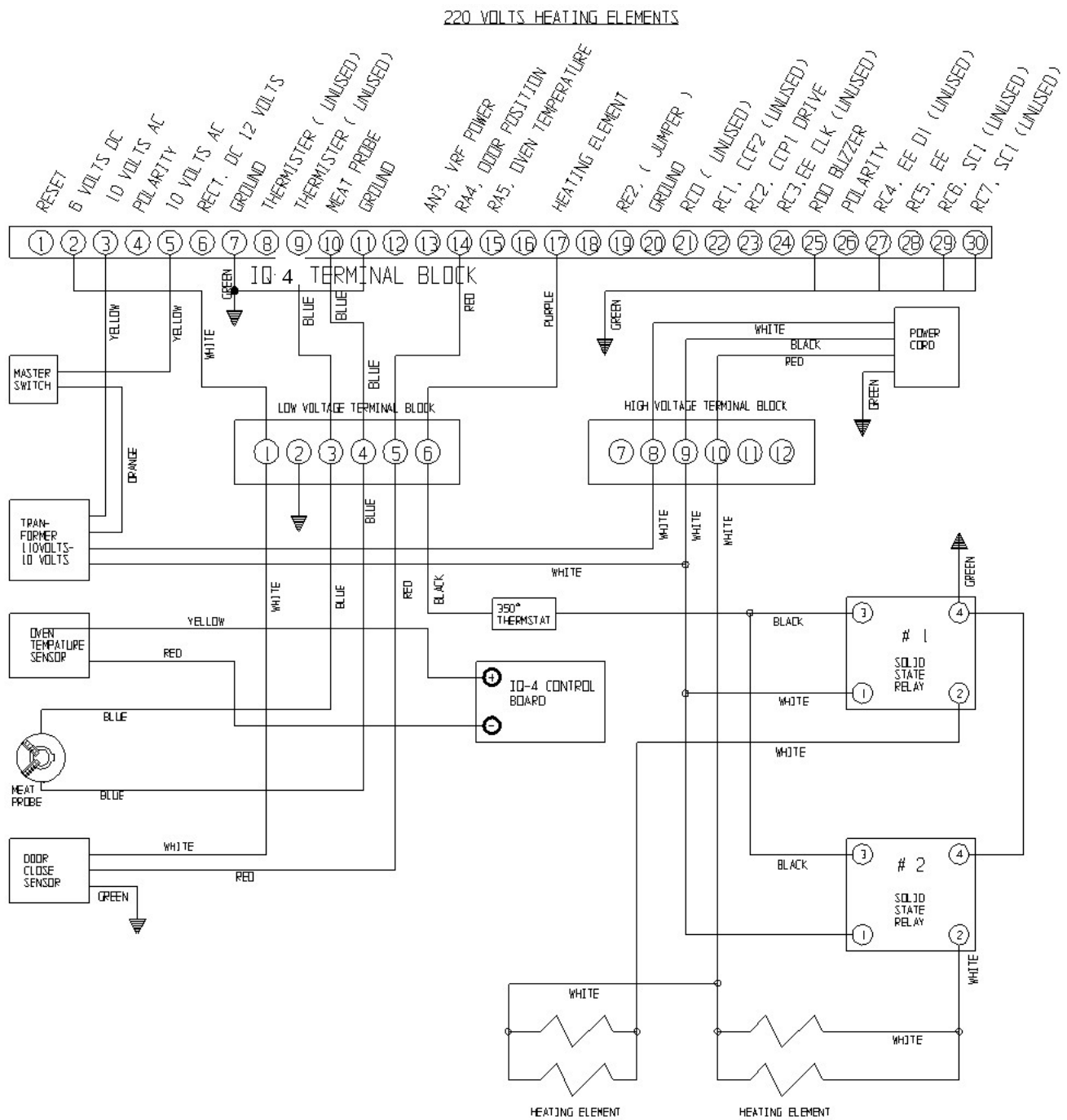
Warranty Procedures

If you have merchandise that you believe is defective, or want to return based on Cookshack's 30 Day Money Back Guarantee, please call Cookshack, Inc., at (580) 765-3669 and ask to speak to a Customer Service Representative (CSR). Have your smoker oven model and serial number available, if applicable. The CSR will take the information you provide and make a determination regarding the solution to the problem. It is Cookshack, Inc.'s, option whether to replace or repair defective merchandise. If you are told that your merchandise will be repaired or replaced under warranty, the following actions will be initiated:

1. The CSR will issue a Return Merchandise Authorization (RMA). This authorization is assigned a number which is used to track the merchandise being returned. Please do not return any merchandise to Cookshack, Inc. without first obtaining this authorization and RMA number. To do so will delay the appropriate resolution of the issue(s) in question. In some cases the CSR may mail you a form with an RMA number included. This form will ask you to detail why it is felt that the merchandise needs to be repaired, replaced or returned. This merchandise must be received by Cookshack, Inc. within 30 days of the issue date of the RMA.
2. Package the merchandise in its original packaging, if possible. If this is not feasible, use equivalent packaging to ensure the safe return of the items. You assume the risk of any loss or damage that occurs during transit due to improper packaging of the merchandise being returned.
3. Using a permanent magic marker clearly write the RMA number on the outside of the packaging. This enables personnel in Receiving to identify the merchandise and initiate the repair or replacement procedures authorized by the CSR.
4. Ship the merchandise to Cookshack, Inc., 2304 N. Ash St., Ponca City, OK 74601, shipping prepaid, F.O.B. destination. At the discretion of the CSR, Cookshack, Inc. may issue a UPS Call Tag. In this case the return freight will be paid by Cookshack. .
5. In some cases, at Cookshack Inc.'s option, replacement merchandise may be shipped to you prior to our receipt of the defective merchandise. In this instance you will be invoiced for the replacement merchandise upon shipment. Credit for this charge will be issued to you upon our receipt of the defective product.
6. Credit may be denied if the returned merchandise is not found to be defective by Cookshack, Inc.; if it is not under warranty; if it is not received at Cookshack, Inc. 30 days after the RMA is issued; if it is damaged due to abuse, misuse, misapplication, or accident; if it has been serviced or modified by any other than an authorized Cookshack, Inc. service agent; is not returned with an RMA number; is not in clean condition; is not complete; is damaged or lost in transit. Inspection performed upon receipt of the product can override the initial decision regarding repair or replacement made by the CSR.
7. Replacement merchandise is sent to you via UPS Ground or common carrier. If you request replacement merchandise be sent by faster service than UPS Ground or common carrier you shall incur the cost of shipping in excess of normal ground service.
8. If this return is based on Cookshack's 30 Day Money Back Guarantee, call Cookshack, Inc. and follow steps 1 through 3 above. **The customer must ship the unit back prepaid.**

APPENDIX C

Wiring Diagram

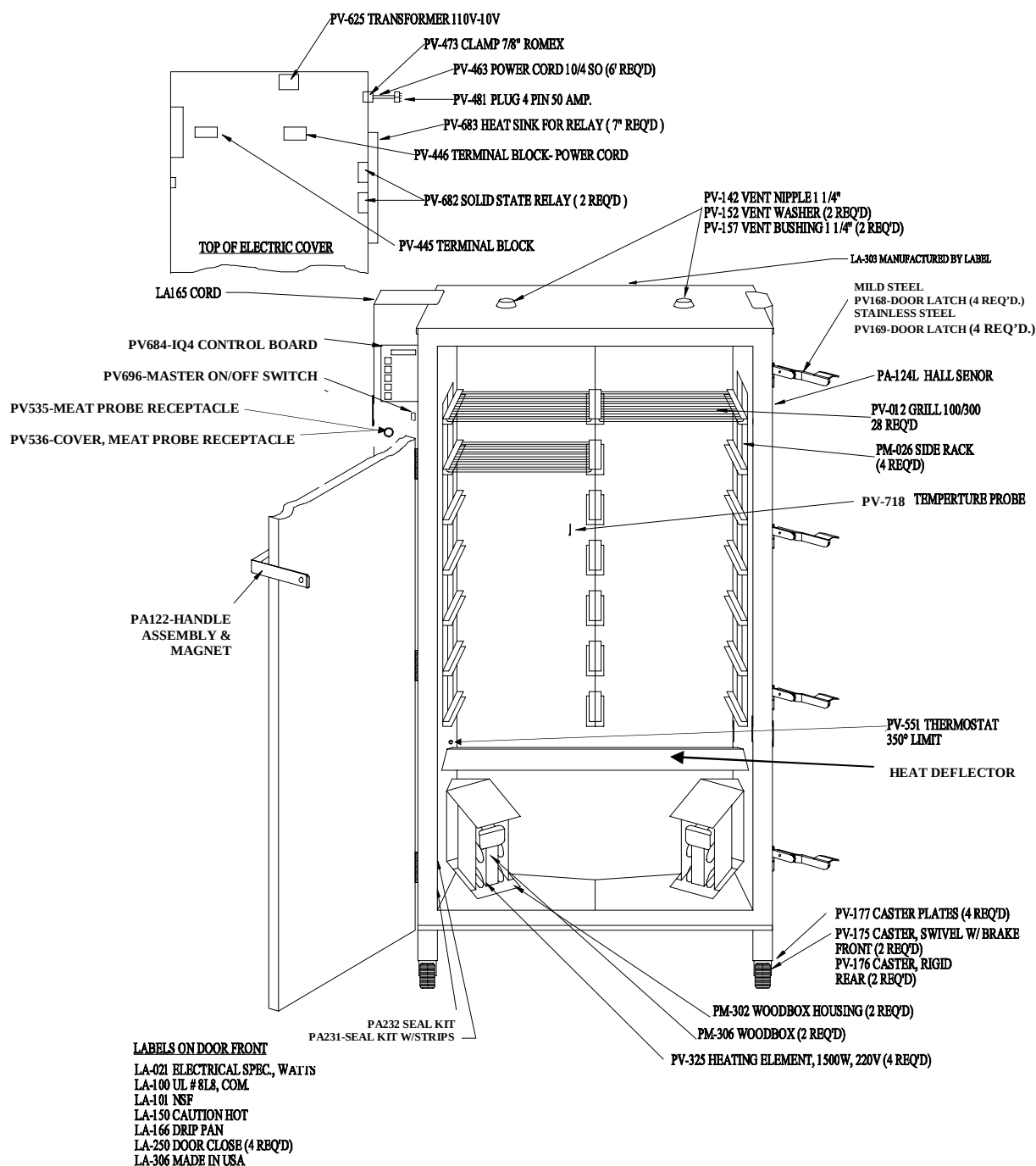


APPENDIX D

Smoker Oven Illustration



PV532-MEAT PROBE, OPTIONAL



APPENDIX E

National Service Policy

Cookshack, Inc.'s National Service Policy is to build quality equipment with easy serviceability. Because of the ease in serviceability, Cookshack does not have National Service Companies to repair our equipment. This allows each restaurant to use the service company of their choice.

If your unit needs repairs, please contact your preferred local service company. If warranty work is deemed necessary, equipment owners should have their local service company contact Cookshack, Inc. at (580) 765-3669 for authorization to perform the repairs.